periodically by USGS since the 1930s. A 1980 survey by the Department of Health (DOH) concluded that 7500 people were dependent on ground water provided by public and private ground water supplies in 18 primary aquifers. Implementation of Article 7 has not yet begun, but it appears that this is a resource-efficient means for accomplishing comprehensive protection of ground water from nonresidential uses.

Aquifer maps prepared by state and local authorities in cooperation with the USGS contain detailed information on aquifer thickness, flow directions, well yields, permeability, and land use above the aquifer. DEC has currently received funds from EPA to identify landfills and other threats above the primary aquifers. DEC is also considering requiring the identification of "wellhead areas/* or zones of influence around public supply wells, as a condition of public water supply permits for wells supplying 100,000 gallons per day.

Other categories of critical areas called for in the State Management Plan include critical recharge areas and special management areas. Special protection may be required in these areas, owing either to the pristine nature of the water resource or to the stresses to the system due to overpumpage or high level of overlying urban land use.

The New York DEC will rely heavily on mapping, public education, and technical support to local planning efforts to protect the primary recharge areas of upstate New York. The DEC has already presented slide shows and other materials to regional and local agencies in 11 primary aquifer areas. The state is developing a pilot aquifer-specific management plan in one six-county capital district region, modeled after the Long Island plan. The plan will identify threats to ground water quality, necessary land use control and remediation efforts, and the appropriate management agencies. This project will serve as a model for the other primary aquifers.

The DEC is also utilizing its hazardous waste staff to identify facilities in the primary aquifers. In addition, the DEC has identified landfills and active SPDES (ground water discharge permit) holders in these areas. Inspection and enforcement priorities will be set based on this information. Direct state control over land uses in primary ground water recharge areas is called for by the State Watershed Protection Law (Chapter 951 of the laws of 1983). The law requires the commissioner of DEC to promulgate a list of hazardous substances that threaten human health and the environment and to issue rules and regulations that will restrict or prohibit the use or storage of hazardous wastes over primary ground water recharge areas. The law specifies that protection be placed on the deep flow recharge zones of Long Island and may have contributed some momentum to the passage of Suffolk County's Article 7. If funded, the law may also be used to protect the primary recharge areas of upstate New York.